



# Jean-David Caprace

---

*PhD, Research Engineer*

## Personal data

Nationality Belgian  
Civil state Marital status  
Birth date Born on January 20th, 1980 in Ottignies, Belgium

## Executive summary

- Experienced in design & production optimization of ship and offshore structures.
  - Possessing research and managerial duties in EU funded projects such as InterSHIP, MARSTRUCT, IMPROVE, BESST and EasySHIP.
  - Possessing overall understanding of full ship life cycle.
  - Possessing a passion for excellence and a pragmatic leadership style with good analytical skills.
  - Member of internationally recognised ISSC congress.
  - Published close to 50 papers in scientific journals and conferences.
  - Speaker in international conferences in Belgium, Brazil, China, Germany, UK, Hungary, Italy, Japan, South Korea, Netherlands, Peru, Taiwan, USA.
- Competences Optimization – Data Mining – Ship design – Ship manufacturing – Scheduling – Structural assessment – Cost assessment – Life cycle assessment – Lean manufacturing – Production simulation – Decision making

## Work experience

- Jan.12–Today **Prometeo research engineer at ESPOL**, Escuela Superior Politécnica del Litoral, Guayaquil, Ecuador.
- Investigating solutions to design and produce sustainable ships
  - Wrote and published 1 research articles in prestigious conferences. See references [CPVR12]
- Sep.11–Dec.11 **Post-doctoral research engineer at ULG**, University of Liège, Liège, Belgium.
- Implemented a scheduling software to optimize the allocation of assembly activities of the protection arch at Chernobyl within the Novarka consortium (Bouygue/Vinci)

*Clos des Pinsons, 31 – 1342 Limelette Belgium*

☎ +32 494599607 • ✉ [jd.caprace@gmail.com](mailto:jd.caprace@gmail.com)

• 🌐 [sites.google.com/site/jdcaprace/](http://sites.google.com/site/jdcaprace/) • 13 avril 2012

- Wrote and published 3 research papers and articles in reputed scientific journals and prestigious conferences. See references [RC11, MCRB11, MBC11]
- Oct.10–Oct.11 **Post-doctoral research engineer at UFRJ**, Federal university of Rio de Janeiro (UFRJ/COPPE/LABSEN), Rio de Janeiro, Brazil.
  - Analysis of a fleet effectiveness through data mining, multi criteria decision making and data envelopment analysis
  - Implementation of a production simulation optimization.
  - Led a team of 5 students for the development of a simulation toolset for shipbuilding.
  - Wrote and published 4 research papers and articles in reputed scientific journals and prestigious conferences. See references [CBR11, CSPR11, CR12, CFA+11]
- Oct.06–Oct.10 **Research Fellow of the National fund of Belgian scientific research (FNRS)**, University of Liège, Liège, Belgium.
  - Researched and developed new methodologies focusing on the reduction of costs and complexity in ship design and production. Several tools/software's, often involving optimization algorithms have been developed in partnership with industry through various research projects and European manufacturers.
  - Member of the internationally recognised ISSC congress (Technical Committee V.3 – Materials and Manufacturing Technology).
  - Wrote and published 27 research papers and articles in reputed scientific journals and prestigious conferences, influencing current trends in the field of ship design and production. See references [CBLR07, CLA+07a, TPCR07, RCL+07b, CLA+07b, RCL+07a, TCB+08, LCA+08, CBL+08, RPAC08, Cap08, MC08, TIL+09, LCFR09, CR09, CML+09, CEH+09, RBD+09, CBH+09, CFLR09, CFHR09, CBR10c, CBR10a, CBR10d, CR10, CBR10b, CR11]
  - Managed relationship with industrial customers and research staff through effective communication and engagement, thereby achieving higher productivity.
  - Peer reviewer for the Journal of Marine Science and Technology (Springer) and for the Computer-Aided Design Journal (Elsevier) since 2009.
- Oct.04–Oct.06 **Research Engineer at ULG**, University of Liege, Liège, Belgium.
  - Led a team of 4 IT undergraduate students for the development of a real-time cost assessment software for ship design.
  - Co-wrote and co-published 10 papers and articles in reputed scientific journals and prestigious conferences. See references [BMCR05, LBC+05a, BLCR05, BCRM05, RMC05, LBC+05b, LBC+05c, CRWV06, TRCR06b, TRCR06a].

---

## Qualifications

- 2005–2010 **PhD degree in applied sciences**, *University of Liège*, Liège, Belgium, See reference [Cap10a].
- 2004–2005 **Sixth year of University studies in shipbuilding (DEA) – Preperation year for PhD**, *University of Liège*, Liège, Belgium, The highest honours.
- 2002–2004 **Fifth year of University studies in shipbuilding (DEC) – 2nd cycle Engineer graduation**, *University of Liège*, Liège, Belgium, The highest honours.
- 2000–2002 **Master degree in industrial engineering**, *High School Paul-Henri Spaak – Industrial Institute of Brussels (ISIB)*, Brussels, Belgium, The highest honours.

- 1998–2000 **Bachelor degree in industrial engineering (candidate – first two years)**, *High School Paul-Henri Spaak – Industrial Institute of Bruxelles (ISIB)*, Brussels, Belgium, Honours.
- 1997–1998 **Seventh year of high-school studies**, *Centre scolaire Saint-Michel*, Brussels, Belgium, Preparatory year for university (A form) – Specialisation in mathematics.
- 1992–1997 **High-school diploma**, *Providence Institute (IPW)*, Wavre, Belgium.

## Internship experience

- May.03–Sep.03 **Alstom Marine (current STX France)**, *Data mining of passenger ships DB to define KPI's focusing production costs reduction*, Avenue Bourdelle, BP 61775, 44617 Saint-Nazaire, France, [Cap03].
- Apr.01–Sep.02 **Hydraulic research laboratory of Walloon Ministry of Equipment and Transport**, *Development and realization of a calibration loop of control valves for certification*, Rue de l'Abattoir, 164 – B 6200 Châtelet, Belgium,[Cap02].
- Jul.00–Aug.00 **Alstom Belgium Sa**, *Business analyse of different sectors (design, industrialization, manufacture, testing, maintenance)*, Rue Cambier Dupret 50-52, 6001 Charleroi, Belgium.

## Teaching experience

### Lectures

- 2011–2012 **Ship engines, steam turbines, pumps, corrosion and ship structures**, *about 4 ECTS (European Credit Transfer System)*, Hogere ZeevaartSchool Antwerpen (HZS), Antwerpen, Belgique.
- 2010–2012 **Manufacturing technology, welding and composite materials**, *about 3 ECTS (European Credit Transfer System)*, University of Liege, Liege, Belgium.
- 2004–2010 **Organisation of shipyards – How to produce a ship**, *about 1 ECTS (European Credit Transfer System)*, University of Liege, Liege, Belgium.
- 2009–2010 **Assembling techniques in shipbuilding industry**, *about 1.5 ECTS (European Credit Transfer System)*, University of Liege, Liege, Belgium.

### Seminars

- 1-30 Jul.2011 **Instructor at the Federal University of Fluminense**, *Naval construction training organized by the University of Liege as part of a project of the University Commission for Development (CUD)*, Federal University of Fluminense, Niteroi, Brazil.
- 15-17 Sep.08 **Speaker at the Federal University of Rio de Janeiro**, *Seminar on production simulation applied to shipbuilding industry*, Federal University of Rio de Janeiro (UFRJ/COPPE),Rio de Janeiro, Brazil.
- 2008–2010 **Instructor at the Antwerp Maritime Academy**, *Training on the interactions between design and production of ships*, Hogere ZeevaartSchool Antwerpen (HZS), Antwerpen, Belgium, the 25th April 2008, the 15th May 2009, the 7th May 2010.
- 14-16 Apr.2008 **Erasmus instructor in at the Polytechnic University of Cartagena**, *Naval Construction Training organized by the University of Liege through ERASMUS exchange*, Polytechnic University of Cartagena – UPCT, Cartagena, Spain.

Clos des Pinsons, 31 – 1342 Limelette Belgium

☎ +32 494599607 • ✉ [jd.caprace@gmail.com](mailto:jd.caprace@gmail.com)

• 🌐 [sites.google.com/site/jdcaprace/](https://sites.google.com/site/jdcaprace/) • 13 avril 2012

14-31 Oct.2004 **Instructor at the Central University of Ecuador**, *Naval construction training organized by the University of Liege as part of a project of the University Commission for Development (CUD)*, Central University of Ecuador – Centro de Excelencia en Transporte Intermodal y Fluvial (CETIF), Quito, Ecuador.

### Research administration

2010–2012 I received the title of assistant lecturer in University of Liège

2009–2010 I has been elected representative of the ArGEnCo department board (Architecture, Geology, Environment & Constructions) of the university of Liège

---

### Awards

April 2007 Germanischer Lloyd award of excellence rewarding the most promising researcher of the COMPIT'07 conference held in Cortona, Italy [CLA<sup>+</sup>07a].

---

### Congresses, symposia and conferences

#### Conferences

- COMPIT'12 **The 11th International Conference on Computer Applications and Information Technology in the Maritime Industries**, *Liège*, Belgium, 16 - 18 April 2012, [CPVR12].
- COMPIT'11 **The 10th International Conference on Computer Applications and Information Technology in the Maritime Industries**, *Berlin*, Germany, 2 - 4 May 2011, [CSPR11].
- RINA'11 **International Conference on Design and Operation of Passenger Ships (RINA)**, *London*, UK, 23 - 24 February 2011, [CBR11].
- SOBENA'10 **23o Congresso Nacional de Transporte Aquaviario, Construcao Naval e Off-shore**, *Rio de Janeiro*, Brazil, 25 - 29 October 2010.
- PRADS'10 **The 11th International Symposium on Practical Design of Ships and Other Floating Structures**, *Rio de Janeiro*, Brazil, 19 - 24 Septembere 2010, [CR10].
- COMPIT'10 **The 9th International Conference on Computer Applications and Information Technology in the Maritime Industries**, *Gubbio*, Italy, 12-14 April 2010, [CBR10c].
- NAV'09 **The 16th International Conference of Ship and Shipping Research**, *Messina*, Italy, 26-27 November 2009, [CFHR09].
- ICCAS'09 **The 14th International Conference on Computer Applications in Shipbuilding**, *Shanghai*, Chine, 1-3 September 2009, [CFLR09].
- COMPIT'09 **The 8th International Conference on Computer Applications and Information Technology in the Maritime Industries**, *Budapest*, Hungary, 10-12 May 2009, [CR09, CML<sup>+</sup>09].
- COMPIT'08 **The 7th International Conference on Computer Applications and Information Technology in the Maritime Industries**, *Liège*, Belgium, 21-23 April 2008, [CBL<sup>+</sup>08, TCB<sup>+</sup>08].
- PRADS'07 **The 10th International Symposium on Practical Design of Ships and Other Floating Structures**, *Houston*, USA, 30 September - 5 October 2007, [RCL<sup>+</sup>07a].

*Clos des Pinsons, 31 – 1342 Limelette Belgium*

☎ +32 494599607 • ✉ [jd.caprace@gmail.com](mailto:jd.caprace@gmail.com)

• 🌐 [sites.google.com/site/jdcaprace/](http://sites.google.com/site/jdcaprace/) • 13 avril 2012

- COMPIT'07 **The 6th International Conference on Computer Applications and Information Technology in the Maritime Industries**, *Cortona*, Italie, 23-25 April 2007, [CLA+07a, TPCR07].
- EAMARNET'07 **The Euro-Asia Maritime International Network**, *Harbin*, Chine, 16-18 January 2007, [CBLR07].
- COMPIT'06 **The 5th International Conference on Computer Applications and Information Technology in the Maritime Industries**, *Leiden*, Pays-bas, 8-10 May 2006, [CRWV06].

### Symposia

- SIIN'10 **II Simposio Internacional de Ingeniería Naval**, *Lima*, Peru, 29 September - 1 October 2010, [Cap10b].
- SINDIC'11 **Seminario de Ingeniería Naval "Desarrollo, Investigación y Divulgación Científica"**, *Lima*, Peru, 10-12 January 2011, [Cap11a].
- JORNADA'11 **VI Jornada Técnica De Sistema De Propulsion**, *Guayaquil*, Ecuador, 11-17 August 2011, [Cap11b].

### Congress

- ISSC'06 **The 16th International Ship and Offshore Structures Congress**, *Southampton*, United Kingdom, 20-25 August 2006, [Cap08].
- ISSC'09 **The 17th International Ship and Offshore Structures Congress**, *Seoul*, South Korea, 16-21 August 2009.
- I was a member of the ISSC Technical Committee Committee V.3 "Materials and Manufacturing Technology" from 2006 to 2009 (see report [CEH+09]). Different intermediate meetings were organized by our technical committee to prepare the congress :
- The first interim meeting has been held in Hamburg, Germany, from 17 to 19 April 2007
  - The second interim meeting has been held in Golden/Colorado, USA, from 8 to 9 October 2007
  - The third interim meeting has been held in Tokyo, Japan, from 30 June to 03 July 2008
- ISSC'12 **The 18th International Ship and Offshore Structures Congress**, *Rostock*, Germany, 10-13 September 2012.
- I am currently a member of the ISSC Technical Committee V.3 "Materials and Manufacturing Technology". Different intermediate meetings are organized by our technical committee to prepare the congress :
- The first interim meeting has been held in Liege, Belgium, from 1 to 2 March 2010
  - The second interim meeting has been held in Rio de Janeiro, Brazil, from 16 to 17 September 2010
  - The third interim meeting has been held in Kaohsiung, Taiwan, from 16 to 18 May 2011

---

### Languages

French	Native language	English	Business fluent
Spanish	Intermediate	Portuguese	Basic
Dutch	Notions		

## Computer skills

Environments	Windows, Linux (bases via Ubuntu)	Languages	SQL, HTML, XML, PHP, VBA, Java, Javascript, C++
Office	MWord, L <sup>A</sup> T <sub>E</sub> X, T <sub>E</sub> Xmaker, MExcel, MPowerPoint, MProject, MVisio, Google tools, GsView, AAcrobat	Development	Eclipse, CVS, Launch4J, InnoSetup, WinMerge, UltraEdit, MVisualStudio
Graphics	Autocad, CorelDraw, CorelPhotoPaint, Rhinoceros, APhotoShop, Allusatrator, APremiere, Pinguin	DB & Mining	MAccess, Oracle, Toad, Pepito, Statistica, Tanagra, Orange, Knime, R
Computation	ANSYS Workbench, CFX, MaxSurf, DecisionLab2000, Frontier Analyst, Expert Choice, DELMIA/QUEST, 3DBeam	Design	LBR5, ValoAuto, OptiView, ShipS-lice

## Interests

Humanitarian	Volunteer and Web Master of the Thermos-Liège asbl that helps the poorest people
Photography	For aesthetics and travel souvenirs
DIY	For the love of things well done and the satisfaction of the result
Music	Good amateur and bad practiser

## Miscellaneous

- o In possession of driving licence (B type)

## Publications

- [BCRM05] V. Bertram, J. Caprace, P. Rigo, and J. Maisonneuve. Rechnergestützte Baukostenschätzung im Schiffsentwurf. *Ship und Hafen*, pages 43–47, May 2005. <http://hdl.handle.net/2268/664>.
- [BLCR05] F. Bair, Y. Langer, J. Caprace, and P. Rigo. Modelling, Simulation and Optimization of a Shipbuilding Workshop. In *COMPIT'05 – The 4th International Conference on Computer Applications and Information Technology in the Maritime Industries*, volume 1, pages 283–293, May 2005. Hamburg, Germany, <http://hdl.handle.net/2268/657>.
- [BMCR05] V. Bertram, J. Maisonneuve, J. Caprace, and P. Rigo. Cost Assessment in Ship Production. *RINA*, 2005. <http://hdl.handle.net/2268/1328>.
- [Cap02] J. Caprace. Développement et Mise au Point d'une Boucle d'Étalonnage pour Vanne de Régulation en Vue d'une Future Accréditation. Master's thesis, Institut Supérieur Industriel de Bruxelles, September 2002. <http://hdl.handle.net/2268/30734>.
- [Cap03] J. Caprace. Recensement et Caractérisation des Pièces Constitutives de la Structure Métallique d'un Navire à Passagers, sous la Double Vision : Produit Fini – Méthode de Production. Master's thesis, University of Liege, September 2003. <http://hdl.handle.net/2268/18667>.
- [Cap08] J. Caprace. Contribution to the specialist committee V.3 entitled "Fabrication Technology" of the 16th International Ship and Offshore Structure Congress. *International Ship and*

- Offshore Structure Congress (ISSC06)*, 3 :241–242, August 2008. Southampton, UK, <http://hdl.handle.net/2268/21500>.
- [Cap10a] J. Caprace. *Cost Effectiveness and Complexity Assessment in Ship Design within a Concurrent Engineering and "Design for X" Framework*. PhD thesis, University of Liege, 1 Chemin des chevreuils, 4000 Liege, Belgium, February 2010. <http://hdl.handle.net/2268/41062>.
- [Cap10b] J. Caprace. Linking Design and Production in Computer Applications for Increased Efficiency. In *SIIN'11 – II Simposio Internacional de Ingeniería Naval*, volume 1, October 2010. Lima, Peru, <http://hdl.handle.net/2268/73320>.
- [Cap11a] J. Caprace. Data Mining in Ship Construction and Operation. In *SINDIC'11 – Seminario de Ingeniería Naval - Desarrollo, Investigación y Divulgación Científica*, volume 1, January 2011. Lima, Peru, <http://hdl.handle.net/2268/107935>.
- [Cap11b] J. Caprace. How to improve the ship efficiency. In *JORNADA'11 – VI Jornada Técnica De Sistema De Propulsion*, volume 1, August 2011. Guayaquil, Ecuador, <http://hdl.handle.net/2268/100673>.
- [CBH+09] J. Caprace, F. Bair, M. Hubler, I. Lazakis, O. Turan, V. Zanic, J. Andric, P. Prebeg, and K. Piric. Production, Operation and Robustness Module. *Final Conference of EU FP6 project IMPROVE*, page 6, September 2009. Dubrovnik, Croatia, <http://hdl.handle.net/2268/25593>.
- [CBL+08] J. Caprace, F. Bair, N. Losseau, R. Warnotte, and P. Rigo. OptiView - A Powerful and Flexible Decision Tool Optimising Space Allocation in Shipyard Workshops. In *COMPIT'08 – The 7th International Conference on Computer Applications and Information Technology in the Maritime Industries*, volume 1, pages 48–59, May 2008. Liege, Belgium, <http://hdl.handle.net/2268/662>.
- [CBLR07] J. Caprace, F. Bair, N. Losseau, and P. Rigo. Minimization of Production Cost by use of an Automatic Cost Assessment Method and Simulation. In *EAMARNET'07 – The Euro-Asia Maritime International Network*, volume 1, pages 399–408, January 2007. Harbin, China, <http://hdl.handle.net/2268/668>.
- [CBR10a] J. Caprace, F. Bair, and P. Rigo. Least Weight and Least Cost Optimisation of a Passenger Vessel. *Mathematical Modelling in Civil Engineering*, (2) :17–26, June 2010. <http://hdl.handle.net/2268/64865>.
- [CBR10b] J. Caprace, F. Bair, and P. Rigo. Multi-criteria Scantling Optimisation of Cruise Ships. *Ship Technology Research*, 57(3) :56–64, September 2010. <http://hdl.handle.net/2268/37759>.
- [CBR10c] J. Caprace, F. Bair, and P. Rigo. Multi-criterion Scantling Optimisation of Passenger Ships. In *COMPIT'10 – 9th International Conference on Computer Applications and Information Technology in the Maritime Industries*, volume 1, pages 56–64, April 2010. Gubbio, Italy, <http://hdl.handle.net/2268/31324>.
- [CBR10d] J.-D. Caprace, F. Bair, and P. Rigo. Scantling Multi-Objective Optimisation of a LNG Carrier. *Marine Structures*, 23(3) :288 – 302, 2010. Doi : <http://dx.doi.org/10.1016/j.marstruc.2010.07.003>, <http://hdl.handle.net/2268/72057>.
- [CBR11] J. Caprace, F. Bair, and P. Rigo. Early Structural Assessment and Optimisation of Passenger Ships. In *RINA'11 – International Conference on Design and Operation of Passenger Ships (RINA)*, volume 1, pages 17–26, February 2011. <http://hdl.handle.net/2268/40044>.
- [CEH+09] J. Caprace, S.F. Estefen, Y.S. Han, L. Josefson, V.F. Kvasnytskyy, S. Liu, T. Okada, V. Papazoglou, J. Race, F. Roland, M. Yu, and Z. Wan. *ISSC'09 – International Ship and Offshore Structure Congress*, chapter Specialist committee V.3 entitled "Fabrication Technology" of the 17th International Ship and Offshore Structure Congress, pages 137–200. August 2009. Seoul, South Korea, <http://hdl.handle.net/2268/21594>.

Clos des Pinsons, 31 – 1342 Limelette Belgium

☎ +32 494599607 • ✉ [jd.caprace@gmail.com](mailto:jd.caprace@gmail.com)

• 🌐 [sites.google.com/site/jdcaprace/](http://sites.google.com/site/jdcaprace/) • 13 avril 2012

- [CFA<sup>+</sup>11] J. Caprace, R. Moreira Freire, L. Felipe Assiss, F. Martin Pires, and P. Rigo. Discrete Event Production Simulation in Shipyard Workshops. In *COPINAVAL'11 – The 22th Pan American Conference Of Naval Engineering - Maritime Transportation & Ports Engineering*, volume 1, September 2011. Buenos Aires, Argentina, <http://hdl.handle.net/2268/100682>.
- [CFHR09] J. Caprace, F. Aracil Fernandez, M. Hübler, and P. Rigo. Coupling Optiview and Production Simulation. In *NAV'09 – The 16th International Conference of Ship and Shipping Research*, volume 1, page 10, November 2009. Messina, Italy, <http://hdl.handle.net/2268/34263>.
- [CFLR09] J. Caprace, F. Aracil Fernandez, N. Losseau, and P. Rigo. A Fuzzy Metric for Assessing the Producibility of Straightening in Early Design. In *ICCAS'09 – The 14th International Conference on Computer Applications in Shipbuilding*, volume 1, pages 211–218, September 2009. Shanghai, China, <http://hdl.handle.net/2268/21472>.
- [CLA<sup>+</sup>07a] J. Caprace, N. Losseau, D. Archambeau, F. Bair, and R. Philippe. A Data Mining Analysis Applied to a Straightening Process Database. In *COMPIT'07 – The 6th International Conference on Computer Applications and Information Technology in the Maritime Industries*, volume 1, pages 415–425, April 2007. Cortona, Italy, <http://hdl.handle.net/2268/660>.
- [CLA<sup>+</sup>07b] J. Caprace, N. Losseau, D. Archambeau, F. Bair, and R. Philippe. A Data Mining Analysis Applied to a Straightening Process Database. *Schiffstechnik - Ship Technology Research*, 54(4) :177–183, October 2007. <http://hdl.handle.net/2268/665>.
- [CML<sup>+</sup>09] J. Caprace, C. Marins, N. Losseau, F. Aracil Fernandez, and P. Rigo. Space Allocation Optimization Applied to Lower Hulls Production of Semi-Submersible Platforms. In *COMPIT'09 – The 8th International Conference on Computer Applications and Information Technology in the Maritime Industries*, volume 1, pages 247–260, May 2009. Budapest, Hungary, <http://hdl.handle.net/2268/9966>.
- [CPVR12] J. Caprace, C. Petcu, M. Velarde, and P. Rigo. Toward a Risk Based Simulation for the Erection of an Offshore Windmill Park. In *COMPIT'12 – Proceeding of 11th International Conference on Computer Applications and Information Technology in the Maritime Industries*, volume 1, pages 312–322, April 2012. <http://hdl.handle.net/2268/114870>.
- [CR09] J. Caprace and P. Rigo. Multi-Criteria Decision Support for Cost Assessment Techniques in Shipbuilding Industry. In *COMPIT'09 – The 8th International Conference on Computer Applications and Information Technology in the Maritime Industries*, volume 1, pages 6–21, May 2009. Budapest, Hungary, <http://hdl.handle.net/2268/9967>.
- [CR10] J. Caprace and P. Rigo. A Complexity Metric for Practical Ship Design. In *PRADS'10 – The 11th International Symposium on Practical Design of Ships and Other Floating Structures*, volume 1, September 2010. Rio de Janeiro, Brazil, <http://hdl.handle.net/2268/37761>.
- [CR11] Jean Caprace and Philippe Rigo. Ship complexity assessment at the concept design stage. *Journal of Marine Science and Technology*, 16(1) :68–75, 2011. Doi : <http://dx.doi.org/10.1007/s00773-010-0107-9>, <http://hdl.handle.net/2268/72188>.
- [CR12] J.-D. Caprace and P. Rigo. A Real-Time Assessment of the Ship Design Complexity. *Computer-Aided Design*, 44(3) :203 – 208, 2012. Doi : <http://dx.doi.org/10.1016/j.cad.2010.12.005>, <http://hdl.handle.net/2268/107446>.
- [CRWV06] J. Caprace, P. Rigo, R. Warnotte, and S. Le Viol. An Analytical Cost Assessment Module for the Detailed Design Stage. In *COMPIT'06 – The 5th International Conference on Computer Applications and Information Technology in the Maritime Industries*, volume 1, pages 335–345, May 2006. Leiden, Netherlands, <http://hdl.handle.net/2268/659>.
- [CSPR11] J. Caprace, C. Tervisani Da Silva, F. Martins Pires, and P. Rigo. Discrete Event Production Simulation and Optimisation of Ship Block. In *COMPIT'11 – 10th International Conference on Computer Applications and Information Technology in the Maritime Industries*,



- volume 1, pages 271–282, May 2011. Berlin, Germany, <http://hdl.handle.net/2268/87948>.
- [LBC+05a] Y. Langer, M. Bay, Y. Crama, F. Bair, J. Caprace, and P. Rigo. Optimization of Surface Utilization Using Heuristic Approaches. In *COMPIT'05 – The 4th International Conference on Computer Applications and Information Technology in the Maritime Industries*, volume 1, pages 419–425, May 2005. Hamburg, Germany, <http://hdl.handle.net/2268/17789>.
- [LBC+05b] Y. Langer, M. Bay, Y. Crama, F. Bair, J. Caprace, and P. Rigo. Optimization of Surface Utilization Using Heuristic Approaches. *Ship Technology Research - Schiffstechnik*, 52 (3) :141–147, July 2005. <http://hdl.handle.net/2268/17789>.
- [LBC+05c] Y. Langer, M. Bay, Y. Crama, F. Bair, J. Caprace, and P. Rigo. Space Allocation Optimization using Heuristic Approaches. In *OPTI'05 – Ninth International Conference in this successful series on Computer Aided Optimum Design*, volume 1, May 2005. Skiathos, Greece, <http://hdl.handle.net/2268/21589>.
- [LCA+08] N. Losseau, J. Caprace, D. Archambeau, A. Amrane, and P. Rigo. Estimation of Welding Distortions and Straightening Workload Through a Data Mining Analysis. In *DFE'08 – International Conference on Welded Structures*, volume 1, page 8, April 2008. Miskolc, Hungary, <http://hdl.handle.net/2268/1329>.
- [LCFR09] N. Losseau, J. Caprace, F. Aracil Fernandez, and P. Rigo. A Data Mining Analysis to evaluate the additional workloads caused by welding distortions. In *MARSTRUCT'09 – The 2nd International Conference on Marine Structures*, volume 1, page 10, March 2009. Lisbon, Portugal, <http://hdl.handle.net/2268/21591>.
- [MBC11] D. Motta, D. Boote, and J. Caprace. Structural Optimization : LBR-5 Software and its application. In *INT-NAM'11 – First International Symposium on Naval Architecture and Maritime*, volume 1, October 2011. Istanbul, Turkey, <http://hdl.handle.net/2268/101091>.
- [MC08] H. Maus and J. Caprace. Organisation des Chantiers Navals. Université de Liège, November 2008. Notes de cours <http://hdl.handle.net/2268/21563>.
- [MCRB11] D. Motta, J. Caprace, P. Rigo, and D. Boote. Optimization of Hull Structures for a 60 meters Mega Yacht. In *FAST'11 – The 11th International Conference on Fast Sea Transportation*, volume 1, page 8, September 2011. Honolulu, Hawaii, <http://hdl.handle.net/2268/101094>.
- [RBD+09] P. Rigo, F. Bair, D. Desmidts, A. Amrane, A. Constantinescu, R. Warnotte, A. Hage, E. Pircalabu, and M. Lapy. Tools for early design stage : presentation of LBR-5 Software. *Final Conference of EU FP6 project IMPROVE*, pages 71–73, September 2009. Dubrovnik, Croatia, <http://hdl.handle.net/2268/36884>.
- [RC11] P. Rigo and J. Caprace. *Marine Technology and Engineering*, volume 2, chapter Optimisation of ship structures. 2011. ISBN 978-0-415-69808-5.
- [RCL+07a] T. Richir, J. Caprace, N. Losseau, M. Bay, M. Parsons, S. Patay, and P. Rigo. Multicriterion Scantling Optimization of the Midship Section of a Passenger Vessel considering IACS Requirements. In *PRADS'07 – The 10th International Symposium on Practical Design of Ships and Other Floating Structures*, volume 1, pages 339–345, October 2007. Houston, Texas, USA, <http://hdl.handle.net/2268/669>.
- [RCL+07b] T. Richir, J.-D. Caprace, N. Losseau, E. Pircalabu, C. Toderan, and P. Rigo. Least cost optimization of large passenger vessels. *Ships and Offshore Structures*, 2(4) :339–345, 2007. Doi : <http://dx.doi.org/10.1080/17445300701699507>, <http://hdl.handle.net/2268/666>.
- [RMC05] P. Rigo, J. Matagne, and J. Caprace. Least construction cost of FSO offshore structures and LNG gas carriers. In *ISOPE'05 – The 15th International Offshore and Polar Engineering Conference & Exhibition*, volume 1, June 2005. Seoul, Korea, <http://hdl.handle.net/2268/658>.

Clos des Pinsons, 31 – 1342 Limelette Belgium

☎ +32 494599607 • ✉ [jd.caprace@gmail.com](mailto:jd.caprace@gmail.com)

• 🌐 [sites.google.com/site/jdcaprace/](http://sites.google.com/site/jdcaprace/) • 13 avril 2012

- [RPAC08] P. Rigo, E. Pircalabu, A. Amrane, and J. Caprace. Optimization of Rolling and Floating Lock Gates. *PIANC'08*, pages 622–630, June 2008. Beijing, China <http://hdl.handle.net/2268/21583>.
- [TCB+08] C. Toderan, JL. Guillaume Combecave, M. Boukaert, A. Hage, O. Cartier, J. Caprace, A. Amrane, A. Constantinescu, E. Pircalabu, and P. Rigo. Structural Optimization of a 220 000  $m^3$  LNG Carrier. In *COMPIT'08 – The 7th International Conference on Computer Applications and Information Technology in the Maritime Industries*, volume 1, pages 107–120, May 2008. Liege, Belgium, <http://hdl.handle.net/2268/663>.
- [TIL+09] O. Turan, A. Ā. Ā-İĀşer, I. Lazakis, P. Rigo, and J. D. Caprace. Maintenance/repair and production-oriented life cycle cost/earning model for ship structural optimisation during conceptual design stage. *Ships and Offshore Structures*, 4(2) :107–125, 2009. Doi : <http://dx.doi.org/10.1080/17445300802564220>, <http://hdl.handle.net/2268/17806>.
- [TPCR07] C. Toderan, E. Pircalabu, J. Caprace, and P. Rigo. Integration of a Bottom-Up Production Cost Model in LBR-5 Optimization Tool. In *COMPIT'07 – The 6th International Conference on Computer Applications and Information Technology in the Maritime Industries*, volume 1, pages 405–415, April 2007. Cortona, Italy, <http://hdl.handle.net/2268/661>.
- [TRCR06a] C. Toderan, T. Richir, J. Caprace, and P. Rigo. Assessment of Ultimate Bending Moment of Ships from a Reliability Point of View, Using Independent Perturbations Method. In *ASRANET'06 – The 3th International ASRANet Colloquium*, volume 1, pages 62–85, July 2006. Glasgow, UK, <http://hdl.handle.net/2268/21864>.
- [TRCR06b] C. Toderan, T. Richir, J. Caprace, and P. Rigo. Ultimate Strength of Stiffened Panels Assessment Taking Into Account Model Uncertainty. In *OMAE'06 – The 25th International Conference on Offshore Mechanics and Arctic Engineering*, volume 1, pages 1–9, June 2006. Hamburg, Germany, <http://hdl.handle.net/2268/27021>.